Amendments to the Claims

Please cancel Claims 10 and 11. Please amend Claims 1, 3, 8 and 12. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently amended) A method of identifying a cDNA construct wherein the cDNA construct expresses a tagged polypeptide having a biochemical activity of interest comprising the steps of:

    a) preparing a tagged cDNA expression library ~~comprising bacterial cells~~ comprising more than one tagged cDNA plasmid construct ~~constructs~~, wherein the constructs are contained in bacterial cells;

    b) culturing the bacterial cells of step a) to produce clones wherein each clone corresponds to a single tagged cDNA construct;

    c) arraying the individual bacterial clones;

    d) pooling a predetermined number of arrayed clones and isolating plasmid DNA from them, thereby producing pooled plasmid clones;

    e) transfecting suitable mammalian host cells with the pooled plasmid clones and maintaining the transfected cells under conditions suitable for the expression of the tagged cDNA construct, thereby producing tagged polypeptides;

    f) assaying the expressed tagged polypeptides for a biochemical activity of interest; and

    g) repeating steps d) through f) one or more times, thereby identifying a cDNA construct encoding the tagged polypeptide having the biochemical activity of interest.

2. (Original) The method of Claim 1 wherein steps d) through f) are repeated until a single cDNA construct expressing a tagged polypeptide having the biochemical activity of interest is identified.

3. (Currently amended) The method of Claim 1 wherein the <u>tagged cDNA plasmid constructs comprise a</u> tag <u>that</u> is selected from the group consisting of: <u>Glutathione S-Transferase (GST-)</u>, <u>c-Myc (Myc-)</u>, HA-, <u>FLAG epitope (FLAG-)</u> and <u>poly-Histidine (His-)</u>.

4. (Original) The method of Claim 1 wherein preparing the tagged cDNA expression library of step a) comprises the steps of:

   i)   obtaining double-stranded cDNA from cells expressing a polypeptide with the biochemical activity of interest;

   ii)   ligating the cDNA into an expression vector wherein the expression vector comprises a coding region for a tag operably linked to a promoter to produce a tagged cDNA construct; and

   iii) transforming competent bacterial cells with the tagged cDNA construct of step ii).

5. (Original) The method of Claim 4 wherein the tagged cDNA library comprises cDNA constructs having specific protein motifs that have been selected by polymerase chain reaction.

6. (Original) The method of Claim 4 wherein the promoter in step ii) is EF-1α.

7. (Original) The method of Claim 1 wherein the mammalian host cells used in step e) are 293 T fibroblast cells.

8. (Currently amended) The method of Claim 1 wherein the biochemical activity of interest is selected from the group consisting of:

   a)   acting as a substrate for a specific enzyme;

   b)   being a specific enzyme;

   c)   interacting with specific antibodies;

   d)   forming specific protein-protein associations;

   e)   forming specific protein-nucleic acid associations;

f)   interacting specifically with any biological element or compound;

g)   possessing cell biological activity <u>selected from the group consisting of:</u> ~~such as~~ growth, differentiation, apoptosis, vascularization, motility or morphological change promoting or inhibiting;

h)   undergoing specific post-translational modifications ~~(phosphorylation, glycosylation, ubiquitination, acetylation, proteolytic cleavage, etc.)~~ in mammalian cells;

i)   possessing any of the activities in a-h only in response to a specific <u>stimulus</u> ~~stimuli~~ in mammalian cells.

9.   (Original) The method of Claim 1 wherein step d) each pool of clones comprises from about 2 to about 1000 clones.

10. and 11.   (Canceled)

12.   (Currently amended) The method of Claim 1 wherein more than one expression <u>libraries</u> ~~library~~ <u>are</u> ~~is~~ prepared and each expression library comprises a different cell type <u>that is</u> ~~wherein the cells are~~ stimulated with a specific stimulus.